

(e) forming one or more pillars from a photoresist having top surfaces on said lower metal layer, defining photoresist pillars;

(f) plating said photoresist pillars defining plated pillars;

(g) removing the seed ^{metal} layer not under the lower level layer;

(h) coating said one or more plated pillars and said seed layer with a low dielectric polymer;

(i) curing said polymer;

(j) exposing said top surfaces of said ^{plating on said} plated pillars; and

(k) forming a metal layer to contact said exposed top surfaces of said plated

pillars.

13. (Amended) A process for forming vias in polymers with low dielectric constants, the process comprising the steps of:

(a) providing a substrate layer;

(b) forming a lower level layer on said substrate, selected from one or more of the group consisting of dielectric, metal and a circuit device;

(c) forming a bottom metal layer on said lower level layer;

(d) forming one or more pillars from a photoresist on said lower metal layer;

(e) coating said one or more pillars with a polymer coating;

(f) curing said polymer;

(g) etching back said polymer to expose said one or more pillars;

(h) removing said one or more pillars to form vias; and

(i) forming a metal layer to contact said bottom metal layer on top of said polymer coating.